



Washington State Ferries' Eagle Harbor Maintenance Facility

Decision Summary

March 7, 2005



**Washington State
Department of Transportation**

The Washington State Ferries' Eagle Harbor Maintenance Facility performs all routine and emergency maintenance for the largest ferry system in the United States. The Bainbridge Island site, adapted from a boat yard facility in the 1960s, serves as the "hub" for the entire WSF system, which includes 28 vessels and 20 terminals. Servicing and repair of these resources occurs at the facility, which employs over 110 skilled laborers and crafts persons.

Washington State Ferries (WSF) is moving forward to improve the Eagle Harbor Maintenance Facility, following the determination Spring 2004 that investing in the facility at its current location is the best use of taxpayer funds.

There have been questions regarding the decision to stay in Eagle Harbor. This decision summary is an opportunity to clarify how WSF made the decision to invest in the Eagle Harbor facility rather than pursue a lease and new construction at an alternative site.

WSF has specific requirements of a maintenance facility location.

WSF's maintenance facility is an on-going operation, with routine vessel maintenance scheduled months in advance, and emergency maintenance performed immediately, as needed. Such a facility has very specific needs, including;

- Deep water access adjacent to a large parcel of flat land
- Protected harbor, safe from currents
- Central Puget Sound location
- Easy vessel access from water
- Flexibility to adapt to WSF's changing facility needs
- Capacity adequate to dock multiple vessels at once, as well as store emergency docking structures
- Adequate space for maintenance shops, storage, and training space
- Parking and suitable maintenance vehicle access
- Adequate capacity to meet future needs of ferry system

How the decision was made to stay at Eagle Harbor.

In the 2001 transportation budget, the Washington State Legislature directed that an outside consultant be selected to conduct a study on whether the WSF maintenance facility at Eagle Harbor should be preserved or relocated (ESSB 2451, section 225, subsection 3). The Washington State Department of Transportation was directed to provide staff support to a Legislative Oversight Committee (LOC), composed of eight legislators. The statute also said that an outside contractor was to be used to study the preservation, replacement, or supplementation of the facility selected.

Ultimately, the study examine "the costs and benefits to preserve and maintain or relocate the facility as well as the impact of Eagle Harbor employment on the local community and Kitsap County, and finally to develop a recommendation on future investment in the Eagle Harbor maintenance facility or possible alternatives." In its analysis, the consultant recommended that WSF investigate relocating the maintenance facility to Todd Shipyards or Terminal 91 in Seattle. It also stated that additional work should be done to refine plans for each alternative and develop a more precise cost estimate. After an initial review of

both alternative sites, WSF learned that property constraints at Todd Shipyards interfered with operations, so only Terminal 91 continued to be studied.

Per the consultant's recommendation, a more precise cost estimate was developed. WSF worked jointly with the consultant to conduct an analysis of risk elements, functional requirements, environmental considerations and financing implications. This effort evaluated and confirmed assumptions, determined needed facility program elements and defined economic variables. Based on the results of the 18-month study, a joint letter between WSF and the consultant in June 2004 recommended WSF remain at Eagle Harbor. (See Attachment A.) This recommendation was communicated by letter to the LOC, the Washington State Legislature Transportation Committee, the Transportation Commission, the Mayor of Bainbridge Island and the general public. The Washington State Transportation Committee approved the WSF Ten-Year Capital Plan (EHMF, 900040N) in Fall 2004. The plan includes a project that reconstructs the WSF maintenance facility at the existing Eagle Harbor site.

THE EAGLE HARBOR SITE IS ECONOMICALLY MORE EFFICIENT.

The following table compares capital and operating costs between keeping the maintenance facility at Eagle Harbor and moving the facility to Terminal 91. The costs were generated from additional study and analysis by WSF and the consultant following the initial report. (See Attachment B for study assumptions.) Relocating the ferry maintenance facility to Terminal 91 would cost an additional \$16 million in capital and operational impact expenditures over a thirty-year period.

WSF Maintenance Facility Capital & Operational Costs	Eagle Harbor	Terminal 91
TOTAL CAPITAL COST (2006 \$)		
New main facilities construction	\$ 31,264,987	\$ 22,414,000
New satellite facilities construction	3,466,000	4,536,064
New improvement to EH site for alternate use		3,302,764
Relocation costs	428,964	\$514,757
Future preservation costs (30 yrs NPV)	1,757,000	1,232,000
Loss of labor productivity during construction	684,631	22,279
TOTAL	\$ 37,601,582	\$ 32,020,865
ANNUAL OPERATIONAL COSTS OR (SAVINGS) (2006 \$)		
Lease cost	\$63,654	\$771,796
Tug boat assistance	\$0	\$108,848
Employee & vendor travel, materials coord. labor costs etc.	(\$42,280)	\$22,003
Night security for Decommissioned Vessels	\$0	\$254,616
Revenue from alt. use of Eagle Harbor	\$0	(\$137,875)
SUB-TOTAL	\$21,374	\$1,019,389
NET PRESENT VALUE OPERATIONAL COSTS (30 YEAR INCREMENTAL COSTS)	\$412,000	\$22,372,000
Grand Total	\$38,013,582	\$54,392,865

THE EAGLE HARBOR SITE IS OPERATIONALLY MORE EFFICIENT.

The Eagle Harbor location is the best site to meet the operational requirements of WSF's maintenance facility, as detailed below.

- No real estate costs (compared to Terminal 91 lease costs)
- Tug boat not needed to assist vessel docking (lower operational cost)
- Vessel moorage at one location (Terminal 91 required vessel storage to be split between two locations, reducing efficiency and adding yearly operational expense)
- Ability to expand on existing site
- Site accommodates the ferry system's changing needs allowing flexible facility design
- No unknown environmental costs (Eagle Harbor superfund clean-up has ensued; the level of environmental contamination at other sites is undefined or underway)
- Minimal environmental mitigation for new construction at Eagle Harbor
- Deep, protected harbor
- Reasonable capacity to expand the maintenance workforce
- Co-location of storage, maintenance shops and training facility
- West side Puget Sound location more efficient (WSF's main commuter vessels are tied up at night on the west side of the Sound, and this is when much of maintenance work is performed.)

Improvements at Eagle Harbor are moving forward.

Improving the maintenance facility at Eagle Harbor enables WSF to gain operational efficiencies and upgrade existing assets at the lowest cost. It also affords an opportunity for WSF to work with the local community to improve traffic and agree on a good use for the one-acre lease. An improved Eagle Harbor Maintenance Facility will provide the ferry system with maximum operational efficiency while minimizing the expenditures of limited financial resources.

ATTACHMENT A

June 3, 2004

The Honorable Betti Sheldon
Washington State Senate
P.O. Box 40423
Olympia WA, 98504-0423

Dear Senator Sheldon;

We would like to update you on the Eagle Harbor Maintenance facility and its future location.

In 2001, the Washington State Legislature directed that an outside contractor be selected to conduct a study on whether the Washington State Ferries (WSF) maintenance facility at Eagle Harbor should be preserved or relocated. A Legislative Oversight Committee was formed, and it selected KPFF Consulting Engineers to conduct the study. KPFF recommended that WSF pursue relocation of the maintenance facility to Todd Shipyards and Terminal 91 in Seattle. It also stated that additional work should be done to refine plans for each alternative and develop a more precise cost estimate.

Upon further review by KPFF and WSF, we recommend that the maintenance facility remain at Eagle Harbor. WSF is excited about the potential for new efficiencies and business opportunities that can be implemented at the existing facility.

We have investigated both relocation alternatives and we have refined the cost estimate for each location. The capital cost to move to Todd Shipyards is \$6 million higher than staying at Eagle Harbor. Despite the \$5 million capital cost savings for relocating to Terminal 91, incremental operational costs for relocating are substantial, in part due to lease payments for land at a relocation site. Incremental annual operating costs are estimated to be \$1.2 million at Terminal 91, \$660,000 at Todd Shipyards, and only \$21,000 if WSF were to remain at Eagle Harbor.

The finances alone speak for themselves. WSF recommends that the maintenance facility remain at Eagle Harbor and is beginning to explore redeveloping the existing facility through a series of meetings with the City of Bainbridge Island. WSF will continue to work diligently to ensure all decisions are made based on service needs, sensible economics, and effectiveness.

Please feel free to contact Mike Thorne if you have any questions or concerns at (206) 515-3401.

Sincerely,

Michael Thorne
CEO, Washington State Ferries

Wade Watson
KPFF Consulting Engineers of Seattle

cc: Doug MacDonald, Secretary of Transportation
Mike Groesch, Senate Highways and Transportation Committee staff
Janice Baumgardt, Senate Highways and Transportation Committee staff
Gary Lebow, House Transportation Committee
Jay Alexander, House Transportation Committee staff
Jill Satran, House Transportation Committee

ATTACHMENT B

WSF Maintenance Facility Study Assumptions

- For comparison purposes, in the refined study, all alternatives include the cost of a satellite facility, whether materialized in the future or not.
- The current 6th Avenue leased warehouse was excluded from all alternatives.
- The cost comparisons are based on a 30-year life for the financial life cycle model, and a net inflation rate of 2% per year with a 5% discount rate.
- Costs are based on 2006 dollars with projected construction to take place in 2007–2008.
- Respective landowners provided both the proposed land lease and moorage rates.
- Operational cost impacts were based on interviews with WSF maintenance management and staff as well as other WSF professionals.
- Potential revenue (paid parking) from an alternate use of the Eagle Harbor site is based on a survey of the area and market rates.